AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original)   An image processing method for detecting objects within an input image, the image being composed of picture elements, the method comprising:

a) segmenting picture elements representing a foreground object within the input image from those picture elements forming the image background using a first segmentation technique, wherein the picture elements segmented as foreground include elements representing a shadow or highlight of the object; and

b) segmenting picture elements which have the characteristics of a shadow or highlight of an object from those picture elements representing the foreground object using at least one other segmentation technique adapted to detect shadows and/or highlights;

the method being characterised by further comprising the steps of:

c) segmenting as foreground surrounding picture elements to those picture elements which are already segmented as foreground;

d) repeating step c) until picture elements which were not segmented as foreground after step a) would be or are segmented as foreground; and then

e) detecting as objects groups of adjacent picture elements which have been segmented as foreground.

2. (original)   An image processing method as claimed in claim 1, and further characterised in that the segmenting step a) further comprises:

for each picture element of the input image which is to be segmented as foreground, validating the foreground segmentation by comparison of the picture element with probability models relating to surrounding picture elements, wherein the

- 4 -

1069111

foreground segmentation is confirmed if at least half of the models indicate that the picture element is foreground.

3. (currently amended)   A computer program or suite of computer programs arranged such that when executed by a computer they control the computer to perform the method of ~~any of the preceding claims~~ <u>claim 1</u>.

4. (original)   A computer readable storage medium storing a computer program or at least on of a suite of computer programs according to claim 3.

5. (original)   An image processing system for detecting objects within an input image, the image being composed of picture elements, the system comprising:

image processing means arranged to receive an input image to be processed, and to apply the following image processing operations thereto:

a) to segment picture elements representing a foreground or moving object within the input image from those picture elements forming the image background using a first segmentation technique adapted to detect differences in the input image from a general background image, wherein the picture elements segmented as foreground include elements representing a shadow or highlight of the object;

b) to segment picture elements which have the characteristics of a shadow or highlight of an object from those picture elements representing the foreground object using at least one other segmentation technique adapted to detect shadows and/or highlights;

and being characterised by further applying the following operations:

c) to repeatedly segment as foreground surrounding picture elements to those picture elements already segmented as foreground until picture elements which were not segmented as foreground after step a) would be or are segmented as foreground; and then

e) to detect as objects groups of adjacent picture elements which have been segmented as foreground.

1069111

6. (original)   An image processing system as claimed in claim 5, and further characterised in that the image processing means is further arranged, for each picture element of the input image which is to be segmented as foreground as a consequence of the segmentation a), to validate the foreground segmentation by comparison of the picture element with probability models relating to surrounding picture elements, wherein the foreground segmentation is confirmed if at least half of the models indicate that the picture element is foreground.